

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims:**

Claim 1 (currently amended) A section of piping for transporting an abrasive slurry which has improved abrasion resistance and which also exhibits ease of cleaning after use, the piping comprising:

a tubular metal body having an exposed exterior surface and an internal surface, the internal surface of the tubular body being plated with a deposit of chromium to give the section of piping a hard chromium case which resists abrasion, thereby providing a tubular metal body of reduced wall thickness and therefore lighter weight which has abrasion resistance at least equal to industry standard piping for concrete pump delivery systems.

Claim 2 (original): The section of piping of claim 1, wherein the chromium case has a thickness in the range from about 0.001 to 0.035 inches.

Claim 3 (original): The section of piping of claim 2, wherein the chromium case has a thickness of approximately 0.010 inches.

Claim 4 (withdrawn): A method of improving the abrasion resistance of a section of piping for transporting abrasive materials, the method comprising the steps of:

providing a tubular metal body of a selected length having an exposed exterior surface and a generally cylindrical internal surface;

exposing the internal surface of the tubular metal body to an electrolyte solution containing at least

water, an electrolyte and a catalyst which provides an accelerated plating rate, the internal surface being exposed to the electrolyte solution at a current density and at a plating temperature sufficient to form a chromium deposit of desired thickness on the internal surface, whereby the internal surface of the tubular metal body is plated with a deposit of chromium to give the section of piping a hard chromium case which resists abrasion.

Claim 5 (withdrawn): The method of claim 4, wherein the electrolyte solution, in addition to water, includes chromic acid and a sulfate component.

Claim 6 (withdrawn): The method of claim 5, wherein the electrolyte solution also contains an alkyl sulphonic acid and an anion of molybdenum.

Claim 7 (withdrawn): The method of claim 6, wherein the alkyl sulphonic acid is a saturated aliphatic sulphonic acid having a maximum of two carbon atoms and a maximum of six sulphonic acid groups or their salts or halogen derivatives thereon.

Claim 8 (withdrawn): The method of claim 7, further characterized in that the cathode efficiency of the process is greater than about 18%.

Claim 9 (withdrawn): The method of claim 8, wherein the current applied to the aqueous electrolyte bath is applied as pulsed direct current to provide an alloy chromium deposit having at least about 1.5% molybdenum deposited.

Claim 10 (previously presented): The section of piping of claim 3, wherein the internal surface of the tubular metal body is mechanically smoothed prior to applying the deposit of chromium.

Claim 11 (previously presented): The section of piping of claim 3, wherein the internal surface of the tubular metal body is honed prior to applying the deposit of chromium.

Claim 12 (currently amended): A section of piping for a concrete pump delivery system having improved abrasion resistance which also exhibits ease of cleaning after use where the delivery system includes a mobile delivery system with an adjustable boom structure, the piping comprising:

a tubular metal body of a selected length on the order of 10 feet, the tubular metal body having an exposed exterior surface and a generally cylindrical internal surface which defines an internal diameter, the internal diameter being on the order of 5 to 6 inches, the internal surface of the tubular metal body being uniformly plated with a deposit of chromium to give the section of piping a hard chromium case which resists abrasion, thereby providing a tubular metal body of reduced wall thickness and therefore lighter weight which has abrasion resistance at least equal to industry standard piping for concrete pump delivery systems, the deposit of chromium being applied by exposing the internal surface of the tubular metal body to an aqueous electrolyte solution at a current density and at a plating temperature sufficient to form a chromium deposit of desired thickness on the internal surface, the electrolyte solution containing at least water, chromic acid and a sulfate component.

Claim 13 (previously presented): The piping of claim 12, wherein the electrolyte solution which is used to form the hard chromium case on the tubular metal body also contains an alkyl sulphonic acid and an anion of molybdenum.

Claim 14 (previously presented): The piping of claim 13, wherein the hard chromium case on the internal surface of the tubular metal body is formed by exposing the internal surface to the aqueous electrolyte bath at a current density in the range from about 15 to 100 A/dm<sup>2</sup> and at a plating temperature in the range from about 20 to 70 °C to form an alloy chromium deposit having at least about 0.5% molybdenum deposited.

Claim 15 (previously presented): The piping of claim 14, wherein the alkyl sulphonic acid is a saturated aliphatic sulphonic acid having a maximum of two carbon atoms and a maximum of six sulphonic acid groups or their salts or halogen derivatives thereon.

Claim 16 (previously presented): The piping of claim 15, wherein the current applied to the aqueous electrolyte bath used to form the hard chromium case on the tubular body is applied as pulsed direct current to provide an alloy chromium deposit having at least about 1.5% molybdenum deposited.